

Abbreviated CV of Lincoln M Raitt, February 2016

Personal information:

Full Name: Lincoln Miles Raitt

Citizenship: South African

Academic career

1970: BSc (SA) with distinction in botany

1970: Hons-BSc (Stell) in plant physiology, cum laude.

1974: MSc (Stell) in plant ecophysiology, cum laude
Sodium tolerance in *Didelta* L'Herit.

1988: PhD (Stell) in plant ecophysiology.
Aspects of the Ecophysiology of *Didelta* L'Herit.

Employment

Jan 1971 to March 1980: Technical officer A & then Senior technical officer (Stell)

April 1980 to June 2013: Lecturer, Senior lecturer, Associate Professor & then Professor
at the University of the Western Cape. Retired in 2013, now
emeritus professor.

Lecturing experience

Undergraduate: mainly plant physiology at first, second and third year.

Honours: mainly plant physiology; supervised over 40 projects.

Masters: Supervised or co-supervised about 30 students: currently 1 working.

PhD: Supervised or co-supervised 3 students, currently 4 working.

Administration.

1997 – 2002 Departmental Chairperson, with most of the associated committee work.

1994 - Deputy chairperson most of the time when not chairperson.

1994 - Faculty library committee chair and member of senate library committee:
chairperson of the senate committed from 1996-1997 and UWC representative on
PALCO in the CALICO system. Deputy chairperson of the senate library
committee since 1997, when we made the DVC chair to try to get more attention
for the library.

2007 - An active member of senate physical resources committee, heavily involved in the planning of the new life sciences building.

2009 - 2010 Departmental Chairperson (4th time), & member of the faculty management, planning, library, teaching and learning, appointments and other committees.

Research

Specific interests: Plant ecophysiology and plant stress physiology, also biological education.

Recent articles published in peer reviewed journals & books:

Francois L Muller, Lilburne F Cyster & Lincoln M Raitt, 2015, The use of trace element enriched fertilizer to increase the micronutrient and trace element content in the edible portions of four vegetable crop species, *Journal for Nutrition, Photon* 108: 130-138.

M Malan, F Muller, L Cyster, L Raitt & J Aalbers, 2015, Heavy metals in the irrigation water, soils and vegetables in the Philippi horticultural area in the Western Cape Province of South Africa, *Environmental Monitoring and assessment* 187: 4085

M Malan, F Muller, L Raitt, J Aalbers, L Cyster & L Brendonck, 2015, Farmyard manures: the major agronomic sources of heavy metals in the Philippi Horticultural area in the Western Cape Province of South Africa. *Environmental Monitoring and Assessment* 187 708

Francois Muller, Abongwe Ketelo, Lilburne Cyster & Lincoln Raitt, 2014, Increased iodine uptake by Swiss Chard fertilized with potassium iodide, *Journal for Nutrition, Photon* 108: 139-145.

MR Ndebele-Murisa, CF Musil, CHD Magadza & LM Raitt, 2014. A decline in the depth of the mixed layer and changes in other physical properties of Lake Kariba's water over the past two decades. *Hydrobiologia* 721: 185-195.

Francois L Muller, Maria E Joubert, Lilburne F Cyster & Lincoln M Raitt, 2014, Heavy metal retention by soils and the subsequent uptake thereof by Cripps Pink/M7 apple trees under organic and chemical fertilizer applications, *International Journal of Agriculture, Photon* 125: 340-346

CD Ruben Aza-Gnandji, Yongxin Xu, Lincoln Raitt and Jonathan Levy, 2013, Salinity of irrigation water in the Philippi farming area of the Cape Flats, Cape Town, South Africa. *Water SA* 39: doi.org/10.4314/wsa.v39i2.3

Ndebele-Murisa M Regina, Musil C Frank & Raitt L Miles, 2012, Phytoplankton biomass and primary production dynamics in Lake Kariba. *Lakes and Reservoirs: Research and Management* 17: 275-289.

Ignatious Matimati, Charles F Musil, Lincoln Raitt and Edmund C February, 2012, Diurnal stem diameter variations show CAM and C₃ photosynthetic modes and CAM-C₃ switches in arid South African succulent shrubs. *Agricultural and Forest Meteorology* 161: 72-79.

Eric Struyf, Kris D Bal, Hans Backx, Dirk Vrebos, Annelies Casteleyn, Eric De Deckere, Jonas Schoelynck, Luc Brendonck, Lincoln M Raitt and Patrick Meire, 2012, Nitrogen, phosphorus and silicon in riparian ecosystems along the Berg River (South Africa): the effect of increasing human land use. *Water SA* 38: 1-10.

Ignatious Matimati, Charles F Musil, Lincoln Raitt and Edmund February, 2012, Non rainfall moisture interception by dwarf succulents and their relative abundance in an inland arid South African ecosystem. *Ecohydrology* DOI: 10.1002/eco.1304.

Khumbudzo Walter Maphangwa, Charles F Musil, Lincoln Raitt & Luciana Zedda, 2011, Experimental climate warming decreases photosynthetic efficiency of lichens in an arid South African ecosystem. *Oecologia* DOI 10.1007/s00442-011-2184-9.

C Musil, J Nyaga, K Maphangwa & L Raitt, 2010, Responses of dwarf succulent plants, lichens, and soils to experimental climate warming in an arid South African ecosystem. In: U Schmiedel & N Jurgens [Eds]: *Biodiversity in southern Africa Vol. 2: Patterns and processes at regional scale*: pp246, Klaus Hess Publishers, Gottingen & Windhoek.

Mzime R Ndebele-Murisa, Charles F Musil & Lincoln Raitt, 2010, A review of phytoplankton dynamics in tropical African lakes. *S Afr J Sci* 106: 13-18.

W Roets, Y Xu, L Raitt & L Brendonck, 2008, Groundwater discharges to aquatic ecosystems associated with the Table Mountain Group (TMG) aquifer: a conceptual model. *Water SA* 34: 77-88.

W Roets, Y Xu, L Raitt, M El-Kahloun, P Meire, F Calitz, O Batelaan, C Anibas, K Paridaens, T Vandenbroucke, NEC Veerhoest & L Brendonck, 2008, Determining discharges from the Table Mountain Group (TMG) aquifer to wetlands in the Southern Cape, South Africa. *Hydrobiologia* 607: 175-186.

Conference & other research presentations: ca. 65

Related activities:

External examiner: At various times for University of Stellenbosch, University of Cape Town, University of Kwazulu Natal and Nelson Mandela Metropole University. Besides undergraduate and honours work this included some 30 masters and 10 PhD theses.

Reviewer for NRF, Earthwatch, Bethel College, University of Fort Hare & various journals.

Member of the 'Dynamics for building a better society' team at UWC, including a special research association with the University of Zimbabwe. This was funded by the Flemish and involved close collaboration with Belgian colleagues. Three 'North-South-South projects were undertaken, two with the University of Zimbabwe & KU Leuven, one with NMAIST Tanzania & KU Leuven.

Involved in the FITMAST ten year project to upgrade teacher qualifications